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REMARKS

In order to better define the taxane so as to expedite the prosecution, claim 1 has been amended by incorporation of the limitations of claim 2. Claims 4 and 11 have been amended and claim 2 has been cancelled. Claims 1 and 3-19 are currently pending.

Rejection under 35 U.S.C. §102(b)

Reconsideration is requested of the rejection of claims **1, 3, 4, 5** under 35 U.S.C. §102(b) as being anticipated by Kant et al., 1994, A Chemoselective Approach to Functionalize..., Tetrahedron Letters, 35(31), 5543-5546 (Kant). Claim **2**, which was not rejected, has been incorporated into claim **1** in order to redefine the taxane and to distinguish the substrate of Kant from that of the subject application. Claims **3-5** depend from claim **1** and are therefore also distinguished. The rejection is therefore moot.

Rejection under 35 U.S.C. §103(a)

Reconsideration is requested of the rejection of claims 1-19 under 35 U.S.C. §103(a) as being unpatentable over F. Gueritte-Voegelein et al., 1986, Chemical Studies of 10-deacetyl baccatin III, Tetrahedron, 42(16), 4451-4460 (Voegelein); and Kant et al. 1994, A Chemoselective Approach to Functionalize..., Tetrahedron Letters, 35(31), 5543-5546 (Kant).

In the reaction described by Voegelein, acylation of 10-DAB, for example, yielded a mixture of products in which the C(7), C(10) and C(13) hydroxyl groups were acylated to varying degrees with no selectivity (see Table 1 and Figure 2 on page 4452). Specifically, Experiments 1-3 described on page 4455 for the acetylation of 10-DAB in the presence of excess amine base (pyridine) all yielded mixtures of products in which the C(7) and/or C(13) hydroxyl groups were also acetylated. Voegelein, therefore, prescribed protection of active hydroxy groups prior to acylation, i.e., *"[c]onsidering these results, we next undertook to protect the two most reactive hydroxyl groups."* This teaches away from the process disclosed and claimed in the present invention wherein acylation results in the selective derivatization of only the C(10)

hydroxyl group of a taxane having C(7) and C(10) hydroxy groups without need for prior protection of other active hydroxyl groups.

The process disclosed by Kant requires protection of the C(7) hydroxy and activation of the C(10) hydroxy prior to acylation. Specifically, Kant is directed to the process of acylating the C(10) hydroxyl group of a taxane with the steps of protecting the C(7) hydroxy with a triethylsilyl group and activating the C(10) hydroxy with n-BuLi (butyllithium) to produce a C(10) alkoxylithium ion, prior to treatment with an electrophile to yield the C(10) acylated taxane. These requirements teach away from the present application which neither requires protection of the C(7) hydroxy nor activation of the C(10) hydroxy before acylation. Indeed claim 3 is directed to acylation of 10-deacetyl baccatin III (10-DAB) which has unprotected C(7) and C(10) hydroxy groups. Nowhere in Kant is it suggested that 10-DAB can be directly acylated without protection of the C(7) hydroxy group.

Based on the teachings of Voegelein and Kant, irrespective of the presence or absence of an amine base, it would not be obvious to one skilled in the arts to attempt selective derivation of the C(10) hydroxy group without prior protection of non-target hydroxy groups. Since prior protection of the other hydroxy groups teaches away from the process of the present invention, the present invention is non-obvious in view of Voegelein and Kant and is patentable over these references.

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CONCLUSION

In view of the foregoing, favorable consideration and allowance of appropriate pending claims is requested. The Examiner is invited to contact the undersigned should any issue remain unresolved. The Commissioner is hereby authorized to charge to Deposit Account No. 19-1345 any fees under CFR 1.16 and 1.17 which may be required during the pendency of this application.

Respectfully submitted,

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